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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,494	02/20/2004	Alain Yang	D0932-00434	2139

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EXAMINER	
TADESSE, YEWEBDAR T	
ART UNIT	**PAPER NUMBER**
1734	

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/783,494	YANG ET AL.	
	Examiner	Art Unit	
	Yewebdar T. Tadesse	1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 20-25, 29-34, 37-41 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Young, Sr. et al (US 5,432,000).

As to claims 20 and 29, Young discloses (see Fig 5 and see column 20, lines 32-52) a system for manufacturing composite fibrous product (capable of being insulation product comprising mat or board containing randomly oriented fibers bonded together and portions as claimed) comprising a conveyor (see Fig 5) for conveying a sheet (120) capable of containing randomly oriented fibers bonded together and the sheet is capable of having first and second major surfaces and a pair of side portions; means for applying a layer of bicomponent fibers (see the system applying fiber in Fig 5) to at least one of the major surfaces, each of the bicomponent fibers including first component (synthetic or wood pulp fibers from conduit 114) and second component (treated fibers); and a heater(130) disposed to heat the layer and the sheet, thereby forming a nonwoven layer meltbonded to the at least one of major surfaces (see column 20, lines 32-52). Young further discloses a source of bicomponent fibers (80) coupled to the chamber.

With respect to claims 21 and 30, Young Sr. et al discloses a second component portion capable of having a higher melting point than the first component portion, the heater capable of heating the layer to a temperature at or above the melting temperature of the first component portion, whereby the first component portion of the bicomponent fibers is meltbonded to the randomly oriented fibers in the insulation sheet.

As to claim 22, in Young Sr. et al the sheet is capable of containing fibers as claimed.

As to claims 23 and 31, in Young Sr. et al the first component portion comprising a thermoplastic (see column 9, lines 41-52)

With respect to claims 24 and 32-33,Young Sr. et al's system uses (see columns 9-10, lines 52-67 and 1-19 respectively) the first and second component portion selected from the claimed group (see column 10, lines 2, 6 and 7 for polyethylene, polypropylene and polyesters) and the bicomponent fibers are capable of having the claimed component portions or configurations.

As to claims 25 and 34, Young Sr. et al discloses (see Fig 5) means for applying including a chamber (part of blending unit 112) disposed above the conveying means (see Fig 5) for depositing the bicomponent fibers onto the sheet, the chamber having a side wall, a top wall and an opening at a bottom thereof; and at least one blower (102) for transmitting the bicomponent to the chamber (112).

As to claim 37, in Young the bicomponent fibers are capable of being applied in an amount less than or equal to 2.5 grams/ft^2.

As to claim 38, Young discloses (see Fig 5 and see column 20, lines 32-52) a system for manufacturing composite fibrous product (capable of being insulation product comprising mat or board containing randomly oriented fibers bonded together and portions as claimed) comprising a conveyor (see Fig 5) for conveying a sheet (120) capable of containing randomly oriented fibers bonded together and the sheet is capable of having first and second major surfaces and a pair of side portions; means for applying a layer of bicomponent fibers (see the system applying fiber in Fig 5) to at least one of the major surfaces, each of the bicomponent fibers including first component (synthetic or wood pulp fibers from conduit 114) and second component (treated fibers); and a heater(130) disposed to heat the layer and the sheet, thereby forming a nonwoven layer meltbonded to the at least one of major surfaces (see column 20, lines 32-52). Young further discloses a source of bicomponent fibers (80) coupled to the chamber and wherein a second component portion capable of having a higher melting point than the first component portion, the heater capable of heating the layer to a temperature at or above the melting temperature of the first component portion, whereby the first component portion of the bicomponent fibers is meltbonded to the randomly oriented fibers in the insulation sheet.

As to claim 39, in Young Sr. et al the first component portion comprising a thermoplastic (see column 9, lines 41-52)

With respect to claims 40 and 41,Young Sr. et al's system uses (see columns 9-10, lines 52-67 and 1-19 respectively) the first and second component portion selected from the claimed group (see column 10, lines 2, 6 and 7 for polyethylene, polypropylene

and polyesters) and the bicomponent fibers are capable of having the claimed component portions or configurations.

As to claim 43, in Young the bicomponent fibers are capable of being applied in an amount less than or equal to 2.5 grams/ft^2.

3. Claims 20-27 and 29-43 are rejected under 35 U.S.C. 102(b) as being anticipated by C. S Francis (US 2,543,101).

As to claim 20-21, 29-30 and 38, Francis discloses (see Fig 1 and columns 8, lines 43-75 and 1-25) a system for manufacturing composite fibrous product (capable of being insulation product) comprising a conveyor (belt 3) for conveying a sheet containing randomly oriented fibers bonded together and the sheet having first and second major surfaces and a pair of side portions (see column 4, line 65); means for applying a layer of bicomponent fibers (chamber 9) to at least one of the major surfaces, each of the bicomponent fibers including first component (non-adhesive fibers) and second component (adhesive fibers); and a heater(heating zone with heating cabinet 23) disposed to heat the layer and the sheet, thereby forming a nonwoven (felt-like mass) layer meltbonded to the at least one of major surfaces. Francis further discloses a source of bicomponent fibers (see blowers 15 and 17) coupled to the chamber and wherein a second component portion having a higher melting point than the first component portion, the heater heating the layer to a temperature at or above the melting temperature of the first component portion, whereby the first component portion

of the bicomponent fibers is meltbonded to the randomly oriented fibers in the insulation sheet.

As to claim 22, in Francis the sheet is capable of containing fibers as claimed (see column 2, lines 27-34).

As to claims 23, 31 and 39, in Francis the first component portion comprising a thermoplastic (see column 3, lines 1-3)

With respect to claims 24, 32-33 and 40-41, Francis's system uses the first and second component portion selected from the claimed group (see column 3, lines 13 and 24-25 for nylon type and polyolefine fibers) and the bicomponent fibers are capable of having the claimed component portions or configurations.

As to claims 25 and 34, Francis discloses (see Fig 1) means for applying including a chamber (9) disposed above the conveying means (belt 3) for depositing the bicomponent fibers onto the sheet, the chamber having a side wall, a top wall and an opening at a bottom thereof; and at least one blower (15, 17) for transmitting the bicomponent to the chamber.

With respect to claims 26, 35 and 42, Francis discloses a chamber including at least one opening on a side thereof coupled to the blower (15,17) through a hose (14,16), wherein the hose is oriented such that the bicomponent fibers are blown into the chamber (9) at an upward orientation toward the top wall (some fibers are blown toward the top wall of the chamber, although the axis of the hoses orientated to cross the top wall of the chamber is not shown).

As to claims 27 and 36, Francis discloses the top wall including an air filter (top wall with air screen 180) configured to block the bicomponent fibers from escaping through the top wall.

As to claims 37 and 43, in Francis the bicomponent fibers are capable of being applied in an amount less than or equal to 2.5 grams/ft^2.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Young, Sr. et al (US 5,432,000) in view of H. W. Collins (US 2,744,045).

Young Sr. et al lacks teaching applying means including a scatter coating system. Collins discloses (see Fig 1) a scatter coating means (17, 24, 45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a scatter coating system in Young Sr. et al as an alternative way of means for applying a layer to evenly distribute the coating component or loosen the clumps of fiber.

7. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Francis (US 2,543,101) in view of H. W. Collins (US 2,744,045).

Francis lacks teaching applying means including a scatter coating system. Collins discloses (see Fig 1) a scatter coating means (17, 24, 45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a scatter coating system in Francis's means for applying a layer (chamber 9 at the opening of the bottom) to evenly distribute the coating component or loosen the clumps of fiber.

Response to Arguments

8. Applicant's arguments filed 06/22/2006 have been fully considered but they are not persuasive. Applicants argue that Young and Francis do not anticipate applicants' invention because "mixing disparate fibers does not make the fibers or the mixture "bicomponent fibers"" and refer the examiner to see paragraph 20 of applicants' specification to see for the system used to form the bicomponent fibers (polymer extruded from the spinnerette) and the configurations or portions of the bicomponents.

Examiner respectfully disagrees. First, In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., spinnerette extruding fibers) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Secondly, the limitations with respect to the insulation sheet (substrate) and the applied components configurations, portions, comparisons of melting temperatures and compositions are the intended use of the apparatus that do not distinguish applicants' apparatus from Young and Francis devices. Young and Francis disclose (see rejections above) all claimed elements of the apparatus or system, wherein the system is capable of functioning the claimed intended uses of the apparatus. The claimed intended uses of the apparatus do not add any structure to the claimed apparatus. As such, the examiner maintains the art rejections over Young and Francis alone and/or in view of Collins.

Additionally, a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus shows all of the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987) **Furthermore, "expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666,667 (Bd. App. 1969). Thus, the**

"inclusion of material or article worked upon does not impart patentability to the claims." In re Young, 75 F.2d 966, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 (USPQ 458, 459 (CCPA 1963)).

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yewebdar T. Tadesse whose telephone number is (571) 272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM-4: 30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YTT

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SUPERVISORY PATENT EXAMINER
Art 1734